

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference F50019PCT	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/010402	International filing date (<i>day/month/year</i>) 16 September 2004 (16.09.2004)	Priority date (<i>day/month/year</i>) 16 September 2003 (16.09.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant RATIONAL AG		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	<p>This REPORT consists of a total of 9 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 03 July 2006 (03.07.2006)</p> <p>Authorized officer Ellen Moyse</p> <p>e-mail: pt05@wipo.int</p>
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

Translation

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference F50019PCT		Date of mailing <i>(day/month/year)</i>	See Form PCT/ISA/210
International application No. PCT/EP2004/010402		International filing date <i>(day/month/year)</i> 16.09.2004	Priority date <i>(day/month/year)</i> 16.09.2003
International Patent Classification (IPC) or both national classification and IPC H05B3/74			
Applicant RATIONAL AG			

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP	Authorized officer
Facsimile No	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/010402

Box No. 1

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

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Box No. III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 16-46

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (indicate particular elements below) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (specify):

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 16-46

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/010402

Box No. IV

Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
- ☐ paid additional fees
 - ☐ paid additional fees under protest
 - ☒ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:

See supplemental sheet

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☐ all parts
 - ☒ the parts relating to claims Nos. 1-15, 41-46:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/010402

Box No. V Reasoned statement under Rule 43bis I(a)(i) with regard to novelty, inventive step or industrial applicability:
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-15, 27-46	YES
	Claims	NO
Inventive step (IS)	Claims 1-15, 27-46	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-15, 27-46	YES
	Claims	NO

2. Citations and explanations:

See supplemental sheet

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Boxes IV, V

1. Reference is made to the following document:

D1: DE 196 48 199 A (AEG HAUSGERAETE GMBH) 13
November 1997 (1997-11-13)

2. The present application meets the requirements of PCT Article 33(2) because the subject matter of claims 1-15, 27-46 is novel.

3. The present application meets the requirements of PCT Article 33(3) because the subject matter of claims 1-15, 27-46 involves an inventive step.

4.1 The invention relates to a heating element for a cooking appliance, in particular for electrically heating at least one item to be cooked in a direct or indirect manner (column 1, line 48), comprising at least one support layer (figure 2, reference sign 20, column 2, lines 6-8), at least one heating element layer (column 2, line 7) which at least in sections rests directly or indirectly on the support layer, and at least one electrical contact or conductor element (column 2, line 10), as is known from document D1.

The closest prior art is document D1, from which the claimed invention differs on account of the characterizing part of claim 1:

- at least one spring-elastic locking element which is or can be connected to the electrical contact or conductor element, it being possible to at least

Supplemental Box

temporarily bring the electrical contact or conductor element into contact with at least one heating resistor and/or with at least one contact point of the heating element layer by means of the spring force of the spring-elastic locking element.

4.2 Claim 1 is therefore considered to be novel.

4.3 Inventive step:

The abovementioned characterizing part of claim 1 means it is possible to prevent the material of a soldered connection wearing quickly, in particular when used over a long period of time.

The technical problem can be considered that of forming a strong, long-lasting connection.

The document which was mentioned in the search report does not describe the connection as could be formed in the characterizing part of claim 1.

In document D1, the connection comprises a connection block and sprung contact tongues. A spring-elastic locking element is not used here, but rather a fixed connection block.

It is not possible for a person skilled in the art to imagine an elastic connection block and fixed contact tongues, as in the characterizing part of claim 1, because the strategy of document D1 involves the opposite.

Claim 1 therefore involves an inventive step.

5. The production method described in independent claim 41 is novel and involves an inventive step because the apparatus as per claim 1 is novel and involves an

Supplemental Box

inventive step (Guideline C.III.3.7).

6. Contrary to PCT Rule 5.1(a)(ii), the description does not cite document D1 or indicate the relevant prior art disclosed therein.

7. The vague and imprecise statement on page 20, lines 7-10 of the description creates the impression that the subject matter for which protection is sought does not correspond to the subject matter defined in the claims, and therefore leads to a lack of clarity (PCT Article 6) when the description is used to interpret the claims.

8. There is no doubt about the industrial applicability of the subject matter of claims 1-15, 27-46. Claims 1-15, 27-46 therefore meet the requirements of PCT Article 33(4).